# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Scheduled Inspection

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DISTRICT: Jackson
COUNTY: JACKSON
ACTIVITY DATE: 03/01/2017
SOURCE CLASS:
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## Contact

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## Purpose

This was a scheduled, announced inspection of the facility located at 12180 Ladd Road, Brooklyn, MI. Scott Miller and I arrived at the facility at about 11:15am on 3/1/17 and met with Eric Johnson and Tim Baker. The purpose of this inspection was to determine compliance with state and federal air quality rules and regulations. The equipment at this site is exempt from requiring a Permit to Install (PTI) under the Air Quality Division (AQD) rules.

## Background

This inspection was the result of a transmittal sent to both the AQD and EPA on behalf of West Bay Exploration. The contents of the transmittal contained annual reporting for facilities subject to New Source Performance Standard (NSPS) in 40 CFR Part 60, Subpart OOOO for oil and gas facilities. It identified this facility, Norvell 22 CTB, as well as two other sites that were subject to NSPS OOOO (Note: the original transmittal has been placed in the file for Norvell 9 under SRN P0793).

Contained in the transmittal were estimates of emissions of Volatile Organic Compounds (VOC) as determined using E&P Tanks 3.0 modelling software. The estimates included both potential to emit (PTE) as uncontrolled emissions as well as controlled emissions, which are contained in a closed loop system and captured by a vapor recovery unit (VRU) or destroyed by backup flares. The Norvell 22 site was listed as having a PTE of greater than 100 tons per year (tpy) of VOC, which is the threshold at which facilities are required to obtain a Title V permit aka Renewable Operating Permit (ROP). Actual emissions from the facility were much lower, and therefore indicated the facility might be eligible to apply for a PTI that effectively reduced the PTE by limiting VOC to below Title V thresholds by requiring process controls (i.e. VRU, flare).

It was also communicated to the company that going forward they will be required to report annually to MAERS. This determination was made because the facility is subject to NSPS OOOO.

#### **Compliance Evaluation**

During the inspection on 3/1/17 we discussed the available options with Eric and Tim pertaining to the facilities PTE above Title V thresholds. While reviewing the tank modelling data, Eric had indicated that the estimates they used for this site were taken as an average across a much larger oil field. By using site specific data, the uncontrolled emissions of VOC dropped to below the Title V thresholds. Eric has since provided me with the

recalculated E&P Tanks data that reflects a PTE of 69 tpy and controlled to 3.4 tpy of VOC (see attached).

Also attached to this report is a spreadsheet of all equipment as installed, which identifies each individual piece of equipment as being exempt from requiring a PTI. The VRU is the primary control method, with emissions only being flared in the case that the unit is offline for maintenance. The facility emissions estimates are based on the manufacturer guaranteed run time as well as Fact Sheet #9845 publish by the DEQ in 2006 for oil and gas facilities. The fact sheet states that working and breathing losses from tank storage may claim 95% control from VRUs and flares (see attached).

Use of the VRU appears to satisfy storage tank control as outlined in NSPS OOOO.

## **Compliance Determination and Recommendations**

After review of the site and documents provided, it appears that this facility is in compliance with state and federal air quality rules and regulations.

I recommend that the necessary record keeping documents be maintained for the PTI exempt equipment, including material throughput and resulting emissions. Additionally, West Bay should monitor all facilities for source-wide PTE of criteria and other air pollutants to ensure future projects are in compliance with AQD and federal rules.

NAME tack Kurlam

DATE 3/24/17

SUPERVISOR